

Subtitle in the Modern World (Captions)

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Abstract

This examination pointed toward considering the job of captioning in film understanding. It zeroed in on the dialects where the captions are composed and on the members' familiarity levels in the dialects introduced in the film. In a starter part of the examination, the most remarkable visual and discourse components of a short arrangement of an English film were extricated by the methods for a free review task subsequent to showing two variants of the film (initial a quiet, at that point a dubbed-into-French rendition) to local French speakers. This visual and discourse data was utilized in the setting of a poll concerning the comprehension of the film introduced in the fundamental piece of the investigation, in which other French local speakers with fledgling, moderate, or progressed familiarity levels in English were shown one of three renditions of the film utilized in the starter part. Individually, these forms had no captions or they included either English or French captions. The outcomes demonstrate a worldwide connection between every one of the three factors in this examination: For the fledglings, visual handling dropped from the variant without captions to that with English captions, and considerably more so if French captions were given, while the impact of film adaptation on discourse perception was the opposite. The high level members accomplished higher understanding for the two kinds of data with the form without captions, and discourse data handling was in every case better compared to visual data preparing. The middle gathering likewise handled discoursed in a preferable manner over visual data, yet was not influenced by film form. These outcomes suggest that, contingent upon the watchers' familiarity levels, the language of captions can effectsly affect film data handling.

The development of innovation and the worldwide augmentation of the Internet network permit a streaming trade of data all through the world, and an incredible piece of this data is of a varying media nature. Given the overall size of the sending implies, it is straightforward how they affect populaces as far as "opening up" to dialects. In 1983, Wade anticipated that continuously 2000, live TV satellites would have made "varying media boondocks" vanish for great. As it were, this expectation has worked out, at any rate on an European scale and all things considered. Measurements show an expanding extent of Europeans communicating in more than one language fluidly, a reality halfway initiated by the moderately new utilization of advanced arrangements that lessen the expenses of film captioning (Gambier, 2007).

Varying media messages can take on various structures and are comprised of a few kinds of data (Rigas & Memery, 2002; Roskos-Ewoldsen, Roskos-Ewoldsen, Yang, & Lee, 2007), for example, nonlinguistic data given by moving pictures, music, or foundation sounds, just as the emotional impact made by the movie producer. As Zacks and Magliano (2010, p. 1) called attention to, "understanding a film is a stunning accomplishment of neural and intellectual handling," as the watcher should coordinate a progression of pictures and sounds into a circumstance looking like a real-life experience.

Another sort of film data comprises of etymological or verbal components that can be introduced either in a hear-able mode (exchanges/melody verses) or in a visual one (composed content), and once in a while the two modes simultaneously. Bubel (2008) clarifies that the psychological cycles empowering one to comprehend a film discourse are like those utilized by "overhearers" in regular circumstances: Viewers utilize their ordinary experience of catching others' discussions to comprehend film exchanges by making guesses about what they hear. In this manner, context oriented data got from the etymological and the nonlinguistic information, added

to a specific measure of the watchers' own insight, should likewise be considered (Bairstow & Lavour, 2009; Magliano, Miller & Zwaan, 2001).

In a film, the etymological information can become dangerous when the watcher doesn't comprehend the communicated in language of the message. All things considered, one of the interpretation strategies accessible is captioning. As indicated by Legros and Crinon (2002), multimodality makes tactile data available in assorted semiotic codes and offers the chance to deal with information through various channels, improving a watcher's odds of understanding a given circumstance. Moreover, watchers may coordinate these various contributions by utilizing their regular real-life experience of multimodality: in spite of the fact that our lives are clearly not captioned, through the entirety of our tangible receptors we continually get data from our environmental factors that should be incorporated into an intelligible cognizance of the climate in which we advance (Granström, House, and Karlsson, 2002). This thinking proposes a beneficial outcome of captions in video form perception through assisting with getting exchanges or duplicating data hotspots for the watcher to join.

The disadvantage of captions is that they can cause a specific measure of data misfortune: The limitation of utilizing close to two-line captions, with a limit of 40 characters for each line (Ivarsson and Carroll, 1998), frequently involves a buildup of verbal data. Moreover, as captions can pull in a watcher's consideration, they can occupy the person in question from taking care of the pictures, as demonstrated by Koolstra, Peeters, and Spinhof (2002); in any event, when captions are not important to appreciation, a programmed perusing conduct by and large happens. Guichon and McLornan (2002) likewise brought up these disadvantages, including that the extra requests consideration forced by multimodality make it important to coordinate consideration in a productive way. At long last, perusing captions is totally different from "typical" perusing for three principle reasons: The perusing time is restricted (forced beat); captions involve a specific spatial position (two lines greatest focused at the lower part of the screen); and keeping in mind that one is perusing, numerous occasions can be going on on-screen (Diaz-Cintas and Remael, 2007).

Captions can include diverse language blends. At the point when captions and discourse are in various dialects (interlingual circumstance), captions are helpful to watchers who don't see (adequately) the language expressed in the exchange. At the point when captions and exchange are in a similar language (intralingual circumstance), captions are fundamentally valuable to hearing-impaired watchers, yet they may likewise help language learning and give extra data concerning the circumstance (Diaz-Cintas and Remael, 2007).

Studies in the field of brain research have explored the impacts of interlingual or intralingual captions independently. D'Ydewalle, Praet, Verfaillie and Van Rensbergen (1991) have detailed that the programmed perusing of intralingual captions was not affected by broad involvement with caption perusing. In any case, their outcomes likewise showed that perusing captions was truth be told a methodology received by the watcher because of its proficiency for understanding the film. This finding was as of late affirmed by Marian (2009, p. 53), who recommended that "audience members are skilled at seeing visual contribution during language preparing, and incorporate it with detectably saw input." This would imply that the presence of visual info is helpful for the watcher since it adds to the significance previously acquired through the hear-able information.

Aside from perception-guided research, intellectual examinations have investigated numerous parts of captioned film appreciation, like language securing (Danan, 1992), education improvement (Kothari, 2008), or even deduction and circumstance model creation (Roskos-Ewoldsen et al., 2007). Utilizing intralingual captions, Lavour and Nava (2008) noticed a worldwide weakening in visual data preparing, contrasted with both a soundless film and a rendition named in the watcher's own language. In contrast with a comparably named film, Grignon, Lavour, and Blanc (2007) showed a crumbling of visual data handling within the sight of interlingual

captions. Also, among watchers with a low familiarity level in the film's language, they discovered better phonetic data preparing with these captions than with a nonsubtitled form. In general, captions seem to apply a negative impact on visual data handling yet an encouraging one on phonetic data preparing.

Comparative outcomes have been gotten by Bairstow and Lavour (2009), who analyzed the perception of familiar and nonfluent watchers in a circumstance utilizing interlingual captions. Undoubtedly, these outcomes showed a worldwide help (at both the visual and phonetic levels) among the nonfluent members instead of a worldwide decay among the familiar watchers.

In any case, all the previously mentioned proof has been drawn from settings that separately include just a single sort of caption. Furthermore, past exploration basically inspected populaces with either a high or a low information on the on-screen dialects, consequently ignoring moderate levels. To arrive at more enlightening determinations, we set up an examination configuration targeting estimating the impact of the sort of caption (interlingual or intralingual) on the perception of visual and discourse information by (French-speaking) watchers whose familiarity level in the language (English) utilized for the exchange was low (fledglings), halfway, or progressed.

It very well may be anticipated that intralingual and interlingual captions effectsly affect understanding relying upon the watcher's information on the on-screen dialects. In fact, the novice members need captions since their English level is excessively poor for a legitimate comprehension of the first, nonsubtitled rendition. Hence, these watchers' appreciation at a worldwide level (yet especially for discourse) ought to be higher when captions are on-screen, and all the more so when they are of the interlingual type.

Members with a middle familiarity level ought to have a lesser requirement for captions, their insight being adequate to remove a worldwide comprehension of the circumstance. The expansion of captions, in any case, should deliver opposing impacts: Subtitles ought to give these watchers a more in-depth understanding, however as they will be constrained to peruse the captions, they will likewise be occupied.

At long last, the first form ought to be entirely conceivable to the high level members. Consequently, for them the actual presence of captions will have a diverting impact, particularly for visual appreciation, which ought to be emphasized with interlingual captions since the two realized dialects will be on-screen at the same time.

PRELIMINARY STUDY

The fundamental examination pointed toward social occasion information that could be utilized in the principle part of the investigation. By showing a film separate, first in a quiet form and afterward in their local language, we anticipated that the viewers should review visual and semantic data that can be considered as the most significant for the perception of the film. These information would then be able to be utilized in the making of an understanding survey for the test part of the examination.

METHOD

A concentrate from North by Northwest (1959) by Alfred Hitchcock, enduring 8 min, 40 s, was appeared to 12 local French high-school understudies matured 16 to 18 years ($M = 16.83$, $SD = .72$). In the wake of survey the

succession in a soundless adaptation, the students had 10 min to record all the visual data they could review on a clear piece of paper. Then, they saw a rendition of a similar film named into French and had 10 min to review all the dialogue-based data they could.

RESULTS

Table 1 reports the mean quantities of data components agreed to the kind of data and the film form. After disposal of both off-base and inferential data, the visual and discourse data was investigated. Data reviewed by more than half of the members was utilized in planning things for a perception poll to be finished in the accompanying primary investigation.

Table 1. Mean quantities of data components (SD) concurred to sort of data and film adaptation

<i>Version</i>	<i>Visual elements</i>	<i>Dialogue elements</i>	<i>Errors/ inferences</i>
Silent	17.42 (2.64)	–	4.00 (2.73)
French (dubbed)	–	9.50 (2.71)	3.17 (1.75)

MAIN STUDY

Method

Participants

Ninety French talking members matured 15 to 18 years ($M = 16.1$; $SD = 1.16$), of which 46% were male, were chosen in a secondary school: 30 of these understudies had no English classes (yet were shown different dialects); 30 were from standard classes in which English was shown 3 hours out of each week; and 30 were from global classes where over half of all exercises were educated in English. The global classes were available to all understudies with a decent English level who wished to select paying little heed to their accomplishment in different subjects. These three gatherings were individually considered to have fledgling, middle of the road, and progressed familiarity levels in the objective language (English).

Materials

An understanding poll included 21 inquiries identified with pictures and 21 identified with exchange. These things managed data circulated all through the film separate utilized in the fundamental investigation. The request for introduction in the survey followed the request for appearance of the data in the film.

Three renditions of the film separate were readied: the first English adaptation (without captions) and the first form with either English captions (intralingual) or French captions (interlingual). In the last two variants, it was guaranteed that the captions related precisely with information exchanged orally, implying that oral and composed data agreed, albeit the stating must be adjusted on occasion to submit to the standards of captioning (see Ivarsson and Carroll, 1998).

Language familiarity was assessed in an assignment requesting the interpretation of 30 words (15 from French to English, and 15 from English to French). For half of these words, the interpretation was assessed to be simple, while progressed information on English was needed for the other half. An autoevaluation task remembered for an individual information poll requested that members assess their language capability on a scale from 1 (not under any condition familiar) to 10 (entirely familiar).

Design

The initial two autonomous factors were between-subject factors: One was the English familiarity level of the members (fledglings, halfway, progressed); the second was the adaptation of the film (without captions, OV; intralingual captions, OVintra; interlingual captions, OVinter). Kind of data in the film (pictures, discourse) was a within-subject factor. By intersection the language familiarity and film form factors, 9 gatherings of 10 members each were gotten. All members responded to the inquiries relating to both picture and discourse data.

Procedure

Prior to review the film separate, every member was independently approached to play out the interpretation test and to fill in the individual data poll including the autoevaluation task. The members inside every familiarity level were then arbitrarily appointed to one of the film forms. Every member saw the film on a PC utilizing Media Player Classic®. The person was then approached to answer the film understanding poll on a similar PC, utilizing Sphinx Lexica® programming. The analysis endured around 40 min. The guidelines given to every member were: "If it's not too much trouble, total the interpretation task admirably well, at that point fill in this short poll. [After this] You will currently see a short film remove in English captioned in French (for this model), kindly watch with consideration yet close to when you generally watch a film. [After the film] You will presently fill in this poll in which you can pick just one answer for every inquiry."

Results

The .05 degree of importance was embraced all through every measurable investigation. Table 2 reports the mean scores for every one of the interpretation and autoevaluation undertakings as per the watchers' familiarity level. The scores got in the interpretation task were dissected in an one-way investigation of difference (ANOVA) with familiarity level as a between-subject factor. A huge familiarity impact was gotten, $F(2, 87) = 545.03$, $\eta^2 = .926$. Post-hoc Tukey tests uncovered that novices had lower scores than intermediate-level members, who were themselves beaten by cutting edge watchers. Also, at every familiarity level a positive relationship was found between the autoevaluation and the interpretation scores, as demonstrated in Table 2.

Table 2. For every familiarity level, mean scores (SD) in every one of the interpretation and autoevaluation errands and connection coefficients (Pearson) between scores in the two assignments

	<i>Translation task</i>		<i>Autoevaluation task</i>		
<i>Fluency level</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Correlation Group</i>
Beginners	4.97	2.25	3.57	1.36	.76
Intermediate	14.30	2.15	6.00	1.05	.59

	<i>Translation task</i>		<i>Autoevaluation task</i>		
<i>Fluency level</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Correlation Group</i>
Advanced	25.17	2.67	7.77	0.97	.61

- Translation task, greatest score = 30. Autoevaluation task, most extreme score = 10.

Table 3 presents the mean perception scores for every familiarity bunch as indicated by sort of data and film form. A 3 (language fluency) $\times$ 3 (film version) $\times$ 2 (data type) ANOVA with rehashed measures on the keep going element was led on the appreciation scores.

Table 3. Mean understanding scores (SD) for every familiarity gathering (novices, middle of the road, and progressed) contingent upon the sort of data (visual and discourse) and the variant of the film

<i>Version</i>	<i>Beginners</i>		<i>Intermediate</i>		<i>Advanced</i>	
	<i>Visual</i>	<i>Dialogue</i>	<i>Visual</i>	<i>Dialogue</i>	<i>Visual</i>	<i>Dialogue</i>
Original	13.7 (1.06)	4.8 (1.69)	10 (1.33)	11.5 (1.27)	13.9 (2.13)	18 (1.49)
Intralingual	11.4 (0.97)	6.9 (1.20)	11 (2.21)	11.7 (1.34)	12 (1.33)	15.7 (0.95)
Interlingual	9.3 (1.16)	14.5 (2.72)	10.6 (1.35)	12.3 (0.92)	10.7 (1.42)	15.6 (0.97)

A critical fluency $\times$ version $\times$ type association was acquired, $F(4, 81) = 28.84$, $\eta^2 = .587$. To break down this communication, a 3 (film version) $\times$ 2 (data type) ANOVA with rehashed measures on the last factor was completed at each level of the familiarity factor.

Beginners

The film version $\times$ information type cooperation was huge, $F(2, 54) = 102.22$, $\eta^2 = .791$. Post-hoc contrasts (Tukey) applied to the collaboration table of the ANOVA were performed following Cicchetti's (1972) strategy. When taking a gander at each sort of data, this showed an essentially lower mean number of right visual answers with OVinter than with OVintra, the best score being gotten with OV. Concerning exchange data, critical contrasts were additionally found, however the other way (most noteworthy score for OVinter, at that point OVintra, lastly OV). Taking everything into account, visual information were preferred handled over discourse information while watching OV and OVintra, though the inverse happened with OVinter.

Intermediate

There was no critical principle impact of adaptation of the film, yet there was a huge primary impact of the sort of inquiry, $F(1, 54) = 11.34$, $\eta^2 = .174$: exchange based inquiries found more right solutions than visual ones. There could have been no other huge impacts.

Advanced

A huge primary impact of the film form was discovered, $F(2, 54) = 20.57$, $\eta^2 = .432$. Post-hoc tests demonstrated that understanding scores were higher with OV than with either OV_{intra} or OV_{inter}. A fundamental impact was likewise found for the kind of inquiry, $F(1, 54) = 130.19$, $\eta^2 = .707$, with the inquiries on discoursed evoking more right answers than those on visual components. The association was not critical.

DISCUSSION

This examination pointed toward researching the impacts of two sorts of captions in movie form understanding, contingent upon the watchers' familiarity with the on-screen dialects. Captions were either in English, as in the film exchange, or in French, the local language of the watchers. Our primary speculation was that the impacts of captioning would be firmly connected to the members' information on the on-screen dialects, spoken and composed, influencing both picture and exchange handling .

An investigation of worldwide cognizance scores showed a huge cooperation between familiarity, film form, and kind of data. This outcome affirms what had been recently appeared, in spite of the fact that by utilizing diverse examination strategies. For example, d'Ydewalle et al. (1991) utilized eye-movement measures to show that the expansion of captions naturally redirected the watchers' consideration. Then again, Grignon et al. (2007) discovered, utilizing a survey, that captions introduced in the watcher's language helped discourse data preparing extensively when the member didn't dominate the communicated in language. Alluding to Paivio's double coding hypothesis and visual-verbal repetition impacts, Reese (1984) clarifies that if the sound track alludes to the visual one, psychological assets are put something aside for higher request handling and more profound elaboration of the messages. Besides, the inverse additionally is by all accounts valid, with a more shallow preparing when excess is missing. For our situation, two unique sorts of data are communicated through a similar visual channel (pictures and captions), prompting an opposition for psychological assets. Moreover, the captions pretty much match what is communicated through the sound channel (discourse) and it is the concurrent introduction of these three sorts of data that produces impedances, because of a solid semantic connection among captions and exchange and a lot more vulnerable connection among pictures and (1) captions and (2) discourse. This knowledge into the psychological cycles at play during captioned film survey can clarify the better preparing of dialogue-based data contrasted with visual information. Consequently, in light of a plan that joins the fundamental factors included, our outcomes in general affirm past discoveries (e.g., d'Ydewalle et al., 1991; Grignon et al., 2007) including just a few estimations of these factors .

Then, we showed that when seeing the first form, novices get more data from visual viewpoints than discourse. At the point when captions are in English, they acquire some exchange perception (contrasted with when there are no captions), in spite of the fact that their language abilities are insignificant, however visual viewpoints remain their chief wellspring of information. At last, with French captions their appreciation is preferable for exchange over for visual data. This lessening in dependence on visual data and expansion in dependence on discourse as more data is given demonstrates that visual information are basic for low-proficiency understudies when endeavoring to fathom a film in another dialect. This affirms our underlying forecast that novices would depend on the captions for understanding, to the detriment of visual data. As to learning through movies, the

finding concerning intralingual captions merits pushing when one thinks about Kothari's (2008) decisions on education increment, something we will return to underneath .

It is important to investigate the inquisitive shortfall of impact of captions for the moderate gathering. As anticipated, captions appear to effectsly affect understanding for this gathering: The solitary huge impact showed a marginally more elevated level of exchange appreciation contrasted with visual things, yet the mean scores for the two sorts of inquiry were consistently center reach. Whichever form was seen, these members didn't accomplish high-level perception. A potential clarification could be that these watchers' familiarity level empowered them to incompletely comprehend information disclosed in the first form, however just if their consideration was profoundly focused on hear-able data, and significantly less so on visual subtleties (see Fernandes and Moscovitch, 2000, on isolated consideration). At the point when captions were on-screen, a similar marvel may have happened: Indeed, as members were informed that the investigation bore on both language and film appreciation, it is conceivable that they needed to demonstrate the degree of their insight by tuning in to exchange instead of understanding captions (members being secondary school understudies, they may have accepted the examination more as a game than as a genuine test). This chance could be tried in an investigation utilizing eye-movement measures or if nothing else a post-viewing meeting asking every member what procedure the person utilized .

Concerning the high level members, despite the fact that they accomplished the most elevated cognizance level, the outcomes showed the anticipated diverting impact of captions. Be that as it may, this impact happened whatever the language utilized in the captions, as though it made a difference little. Besides, dialogue-based data was constantly prepared better compared to visual information, even in the nonsubtitled adaptation. These outcomes suggest that when captions are superfluous to cognizance, they can upset the preparing of the two kinds of data. One could expect that consolidating multimodality (sound and visual) with multilingualism requires more consideration regarding accomplish a given degree of semantic data appreciation than when just one (excess) language is utilized, yet that the expense of this is lower consideration. This is presumably because of a programmed understanding conduct and is free of the watcher's will (D'Ydewalle et al., 1991). Additionally, this could lead the watcher to contrasting what is said and what is composed (requiring more consideration when the composed content is an interpretation), accordingly leaving less an ideal opportunity to break down the pictures. It is indeed hard to appraise which of these components can best clarify the diverting impact estimated for the high level gathering, however relying upon the reason for the message, the decision of the arrangement used to pass it on ought to be made in the light of these discoveries, since significant data could be lost for a specific piece of the populace, dropping the planned effect of the message .

This examination has a few restrictions. Not exclusively does the procedure utilized not grant us to investigate the watchers' insight measures in detail, however the two explicit dialects utilized may have affected the outcomes as their closeness may have encouraged a specific coordinating between the orthographical types of words (cognates) in French and in English. All things considered, our outcomes empower a superior comprehension of how the presence of captions can impact film cognizance regarding the familiarity level of the watcher populace. A significant point is the advantage that captions accommodate the worldwide understanding of those watchers with low dominance of the language of the film. In reality, albeit visual information handling lessens when captions are on-screen, this is to a great extent remunerated by the addition in discourse preparing. Such assistance drives us to feel that captions may be utilized to deliver some coincidental learning of the film language: Even intralingual captions appear to help in the comprehension of semantic data, suggesting that the watchers with low familiarity focus on unknown dialect captions as well as figure out how to extricate some sense out of them, perhaps reasoning the words' importance dependent on the visual and logical

data from the film (see Kothari's, 2008, discoveries on same-language captioning and education increment). Along these lines, the phonological unit of an unfamiliar word and its orthographic unit in the captions can be planned (Yuksel and Tanriverdi, 2009): Orthographical and phonological data is enacted simultaneously and merges in a similar semantic data. Besides, encouraging exploration bearing on language procurement utilizes "switched" captioning, with the watcher's native language in discourse and the to-be-learned language in captions (D'Ydewalle and Pavakanun, 1992). Eminently, Bachetti (2003) showed that this technique was powerful in second language learning, in collaboration with the watcher's language learning systems. Consequently, one could consider placing such a methodology to use in unknown dialect instructing at school, as recommended by Danan (1992).(

All in all, research bearing on the job of captions in film discernment and appreciation should assume a significant position among general varying media data handling contemplates which are quickly creating in different fields of brain science. These investigations misuse eye-movement following methods and event-related possible measures during caption perusing. By looking further into the cycles at play during this abnormal sort of perusing, we may find the degree to which captions can prompt better cognizance, retention, and in any event, learning of the data contained in the varying media archive.

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